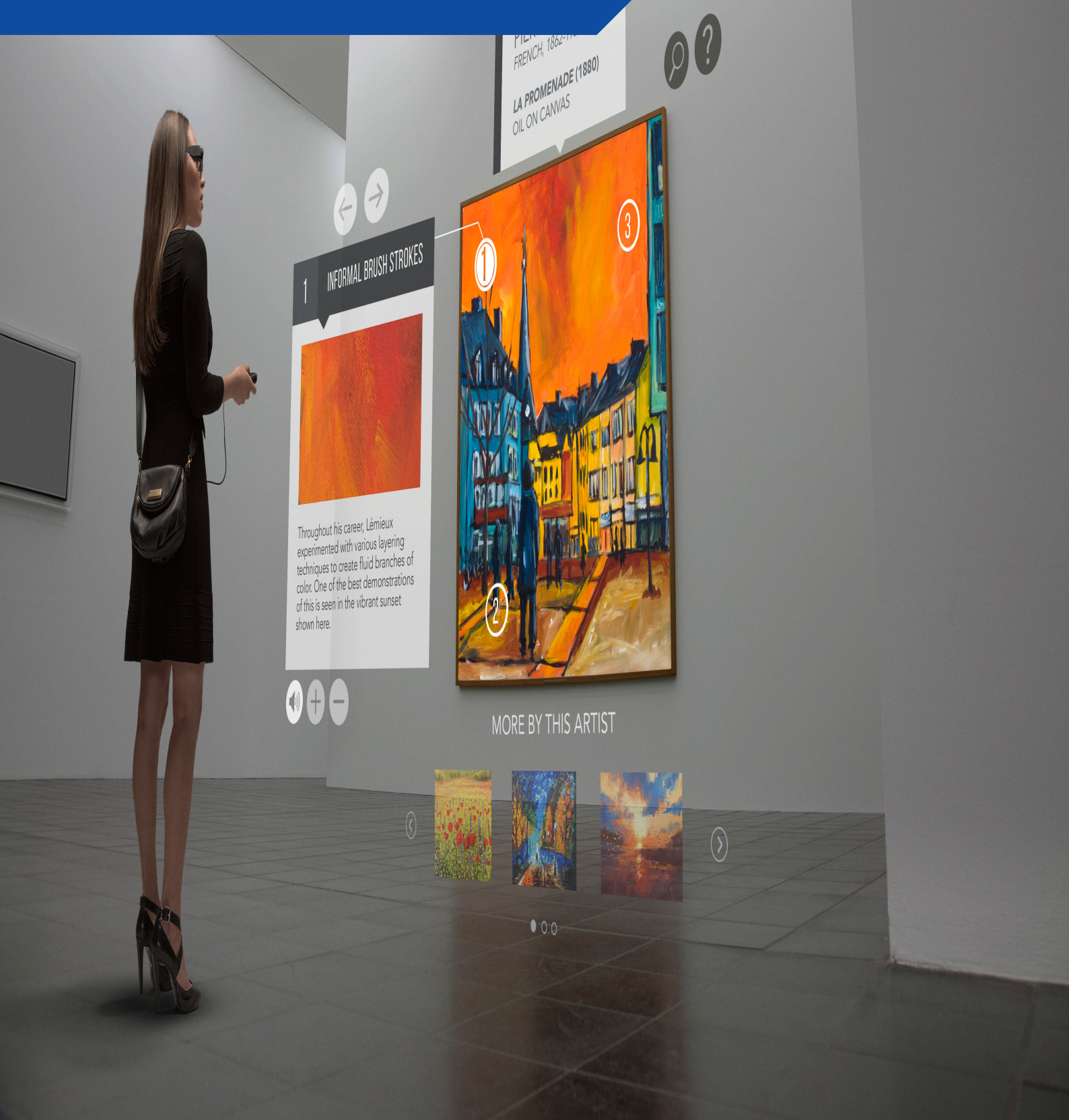


Moverio BT-300 smartglasses helps visually-impaired people



1 INFORMAL BRUSH STROKES

Throughout his career, Lémieux experimented with various layering techniques to create fluid branches of color. One of the best demonstrations of this is seen in the vibrant sunset shown here.

PIERRE-AUGUSTE
RENOIR, FRENCH, 1862-1919
LA PROMENADE (1880)
OIL ON CANVAS

MORE BY THIS ARTIST

According to the World Health Organization (WHO), there are 285 million people with Low Vision pathologies, i.e. 4% of the world's population. In more developed countries, the percentage is greater and maintains an upward trend. Epson Moverio improves the quality of life of Low-Vision patients.

Low Vision refers to any loss of vision that cannot be corrected with eyeglasses or contact lenses, either medically or surgically.

The main pathologies that cause Low Vision are: age-related macular degeneration (AMD), glaucoma, retinitis pigmentosa, etc. Many of these pathologies are genetic and degenerative. In other cases, Low Vision may result from organism disorders or traumatic accidents.

Disruptive technology as an aid to visual impairment

Traditional Low-Vision aids are uncomfortable, different for each activity and costly. The market has manual or electronic magnifying glasses, inverted telescopes, CCTV readers, selective filters, among others. In recent years, cutting edge technologies are offering advanced solutions to help the visually impaired by means of diverse applications (OCR, geolocalization, TTS, barcode readers, ultrasonic obstacle detection, etc.), installed on mobile phones and smartglasses.

The Retiplus application processes images captured by the Moverio BT-300 camera, directing and adjusting it to the patient's "remaining visual field," i.e. expanding the useful field of view.

Just like traditional eyeglass lenses that are graded by an optometrist, the Moverio smartglasses must be "graded" using the Retiplus application specifically for the pathology and conditions of each patient, being able to grade several configurations in the lenses for close and distant vision (reading, watching TV, walking).

Adherence to treatment and the patient's well-being

Low-Vision optometrists and specialists that have performed tests on patients are satisfied about having a custom technology solution, which provides usage data, increases communication with their patients and improves adherence to rehabilitation treatment.

On the other hand, patients who have already tested the system are surprised by the lightness of the Moverio BT-300 smartglasses and battery life. Also, the augmented reality makes them suited for use while walking and for outdoors.

PlusIndes Retiplus



Retiplus entails an absolute innovation that concentrates Low-Vision aids -allowing the patient to improve his/her visual performance- and visual therapy execution. It also significantly helps the therapist, who can at all times know the settings used by the patient.

Dr. José María Ruiz Moreno

*Catedrático Oftalmología UCML -
Scientific Advisor*

Key Facts

Moverio BT-300 Smartglasses

Aids Visual Impairment

Improves the Quality of Life of Low-Vision Patients

Augmented Reality to expand the patient's remaining visual field.

Custom Technology Solution

More common pathologies

Among the set of pathologies that are shown below the Low-Vision heading, there are retinitis pigmentosa, AMD, glaucoma and diabetic retinopathy. Retiplus not only helps the patient improve his/her quality of life, but also the specialist to understand how the patient sees.

People with Low Vision can combine several functions in just one device to optimize their residual vision. Similarly, it provides the ophthalmological community with future studies and analysis on Low Vision through usage data on the cloud platform.



About PlusIndes and Retiplus

PlusIndes is a Spanish company that researches technology solutions to improve the quality of life and autonomy of visually-impaired individuals. The Retiplus system developed by PlusIndes is based on a range of patents registered in Spain and the U.S.A. It is a disruptive development as regards the current aids for Low Vision, which uses Augmented Reality (AR) to expand the patient's remaining "visual field."

